HP NetServer E 800
Installation Guide

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Audience Assumptions

This guide is for the person who installs, administers, and troubleshoots LAN servers. Hewlett-Packard Company assumes you are qualified in the servicing of computer equipment and trained in recognizing hazards in products with hazardous energy levels.

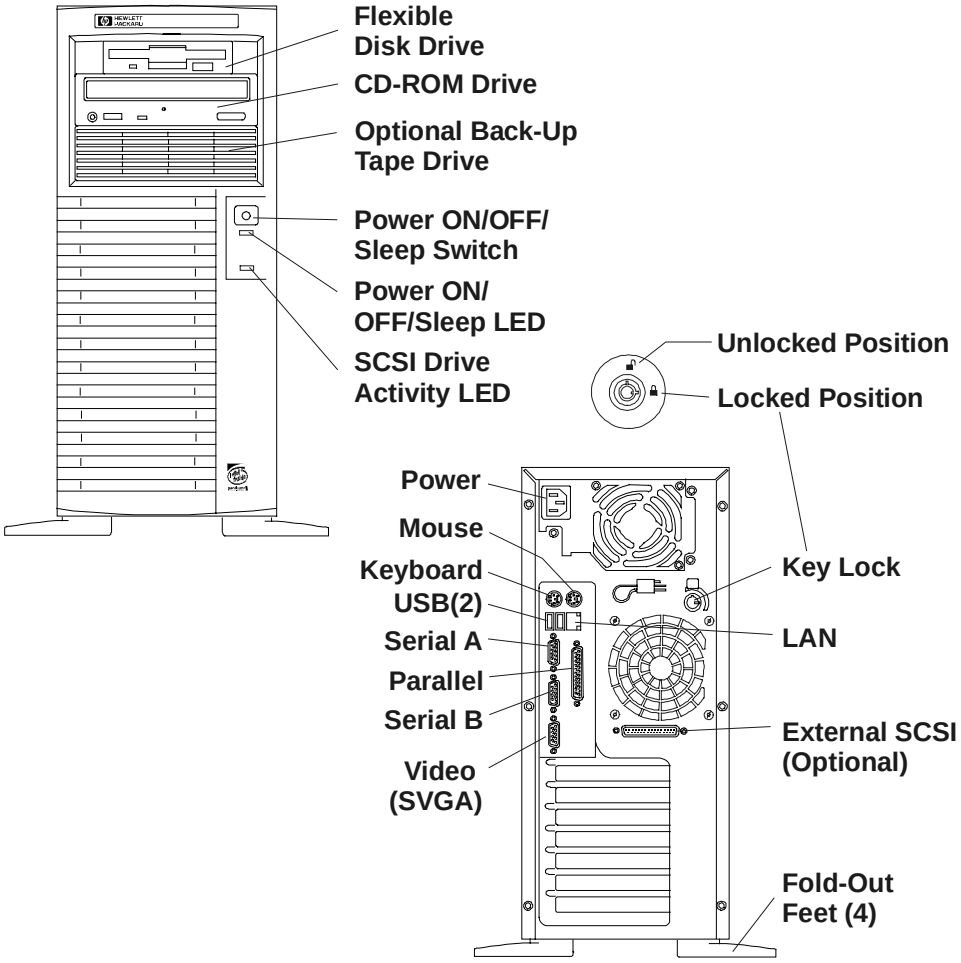
Contents

Setting Up the HP NetServer E 800 1
Introduction 1
Step 1: Attaching all the Cables 2
Step 2: Opening the HP NetServer 3
Step 3: Installing Memory 5
Step 4: Installing Mass Storage Devices 6
Step 5: Installing Adapter Boards 10
Step 6: Installing a Second Processor 14
Step 7: Configuring the HP NetServer 19

Setting Up the HP NetServer E 800

Introduction

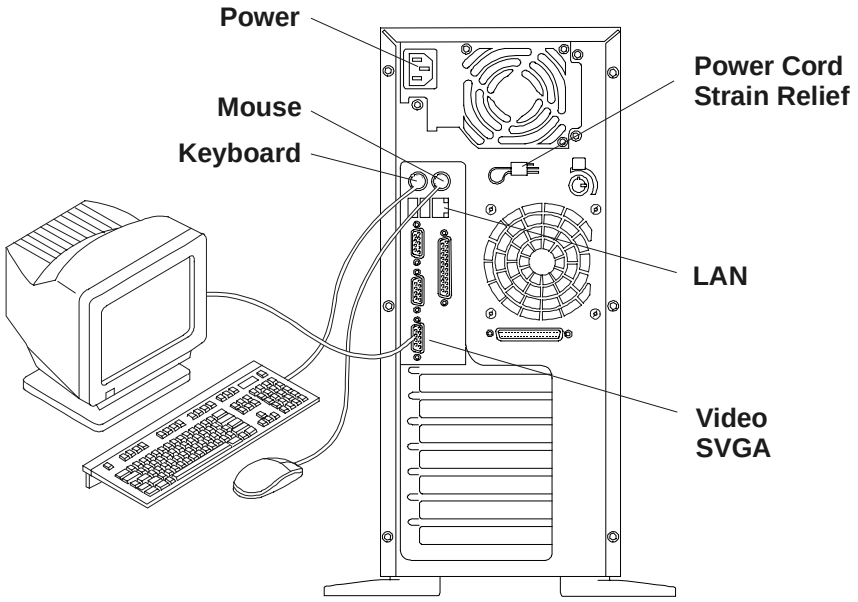
This installation guide is a quick reference for HP NetServer E 800 installation. Skip any steps that do not apply to your installation. Refer to the figures below for connection and operating information. For more information, refer to the *HP NetServer E 800 User Guide*.



Step 1: Attaching all the Cables

If you are not installing any accessories, attach all available cables to the respective connectors, then go to "Step 7: Configuring the HP NetServer."

NOTE	The two USB connectors are reserved for printers, scanners, and external modems. The NetServer does not support USB connections for the keyboard and mouse.

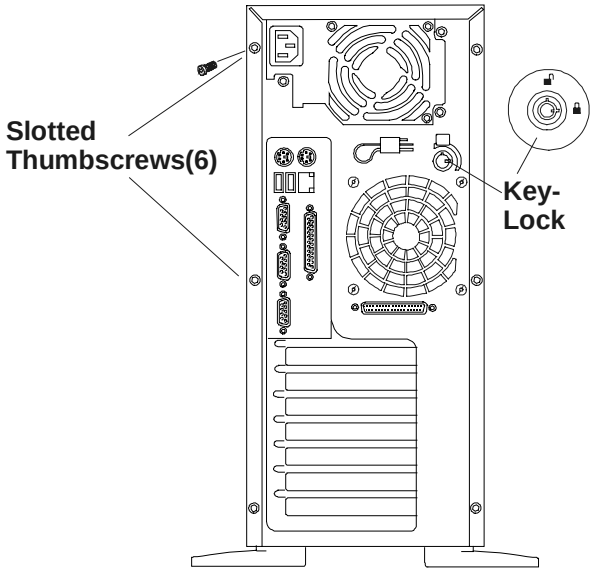


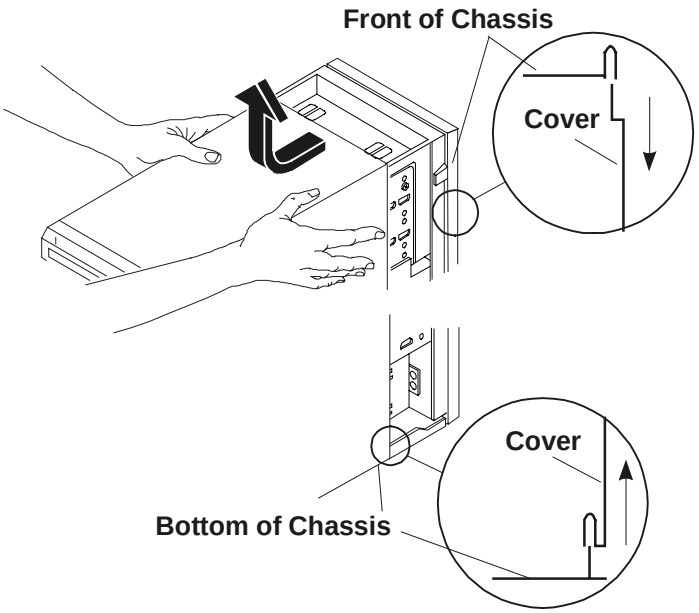
Step 2: Opening the HP NetServer

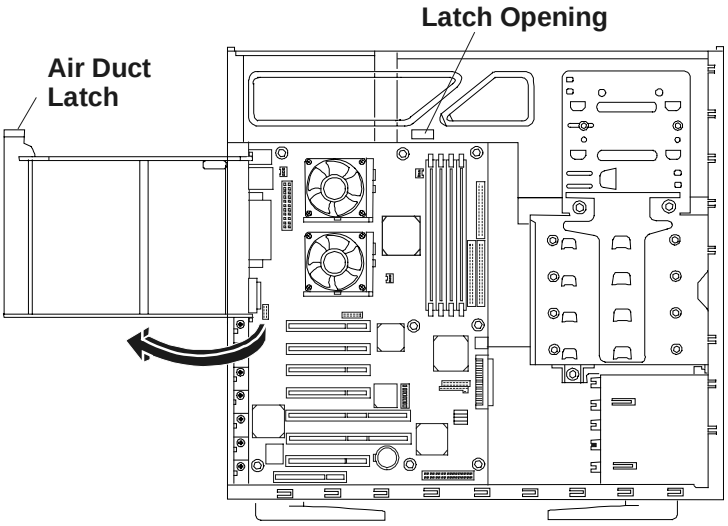
Tools Required:

- ¼ inch flat-blade screwdriver
- Torx T-15 driver

WARNING	Before removing the cover, always disconnect the power cord and remove the telephone cable. Disconnect the power cord to avoid exposure to high energy levels that may cause burns when parts are short-circuited by metal objects such as tools or jewelry. Disconnect telephone cables to avoid exposure to shock hazard from telephone ringing voltages.

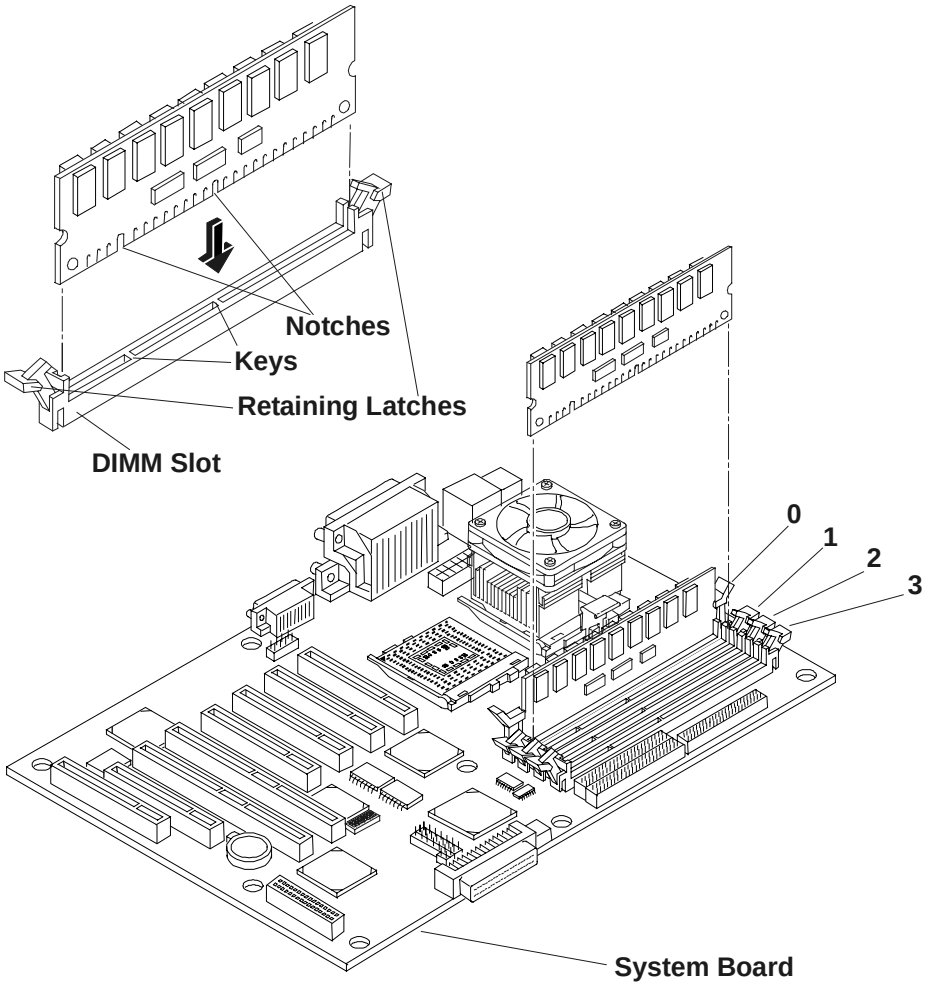



Front of Chassis
Cover
Cover
Bottom of Chassis


Latch Opening
Air Duct
Latch

Step 3: Installing Memory

- Use only HP DIMMs, which are 3.3V, 168-pin, PC133 (133 MHz), buffered SDRAM DIMMs in 128 MB, 256 MB, or 512 MB.
- DIMMs may be installed in any slot, in any combination (sizes mixed), in any order, but HP recommends starting at slot 0 and filling the slots in order with the largest size first: 0, 1, 2, and 3.
- Ensure both latches close on the DIMM when completely installed.



Step 4: Installing Mass Storage Devices

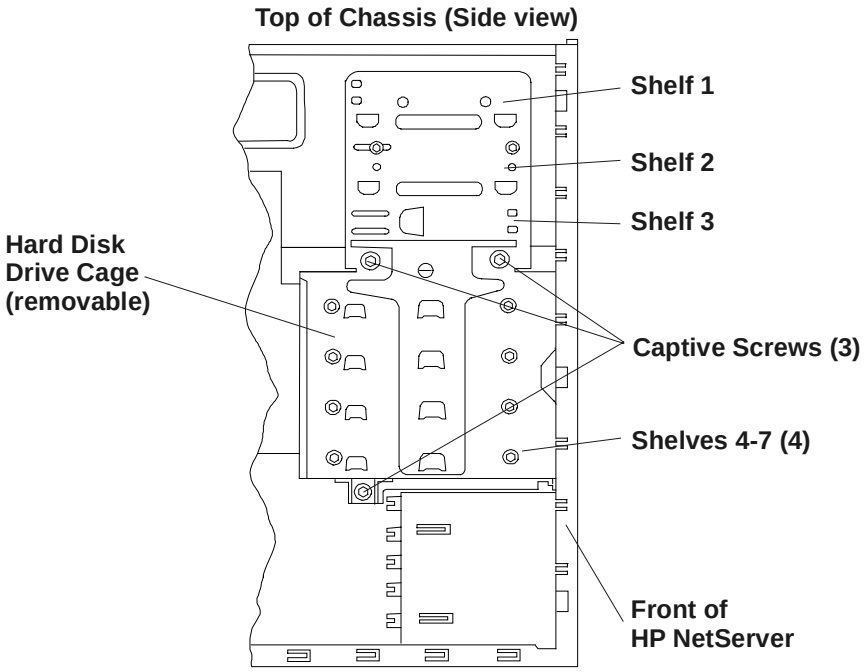
- The NetServer is internally limited to 7 mass storage shelves.

  The flexible disk drive and CD-ROM drive, which are standard on all models of the HP NetServer E 800, occupy shelves 1 and 2 respectively.

- If a backup tape drive is used, it will occupy shelf 3.
- Shelves 4, 5, 6, and 7 are available for up to four SCSI hard drives and at least one is required for the boot drive.
- IDE drives are not supported in this NetServer.

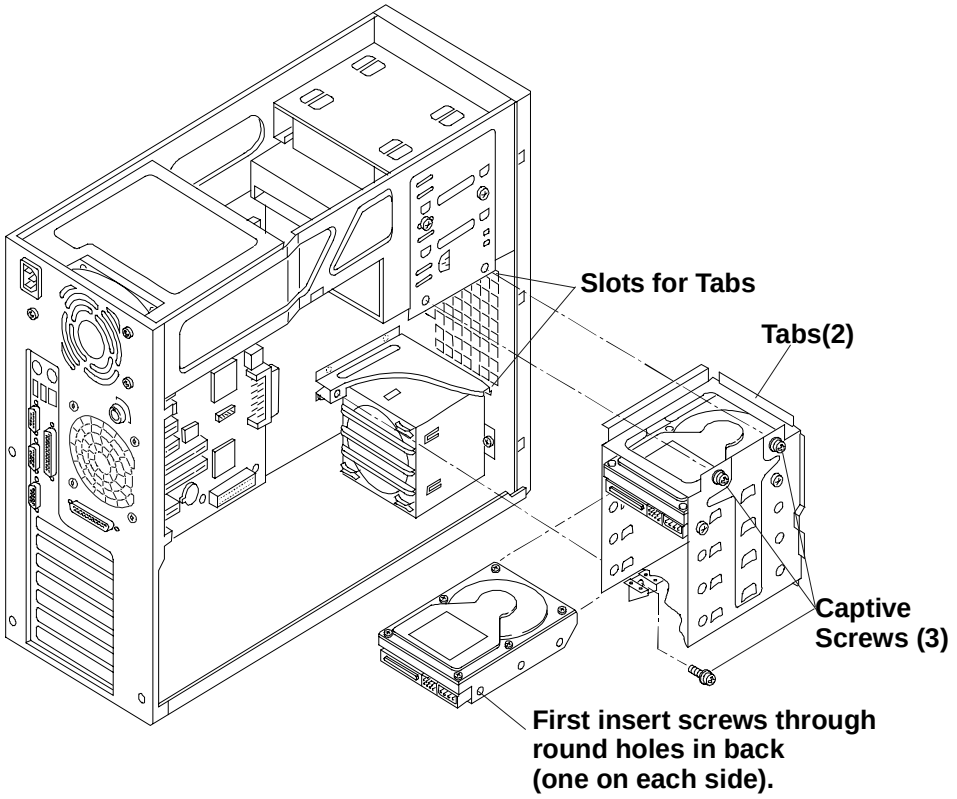
CAUTION	Do not connect high voltage differential (HVD) SCSI devices on the SCSI bus or you will damage the other devices.

1. Remove the Drive Cage by loosening the three captive screws.



2. Install the SCSI hard disk drive.

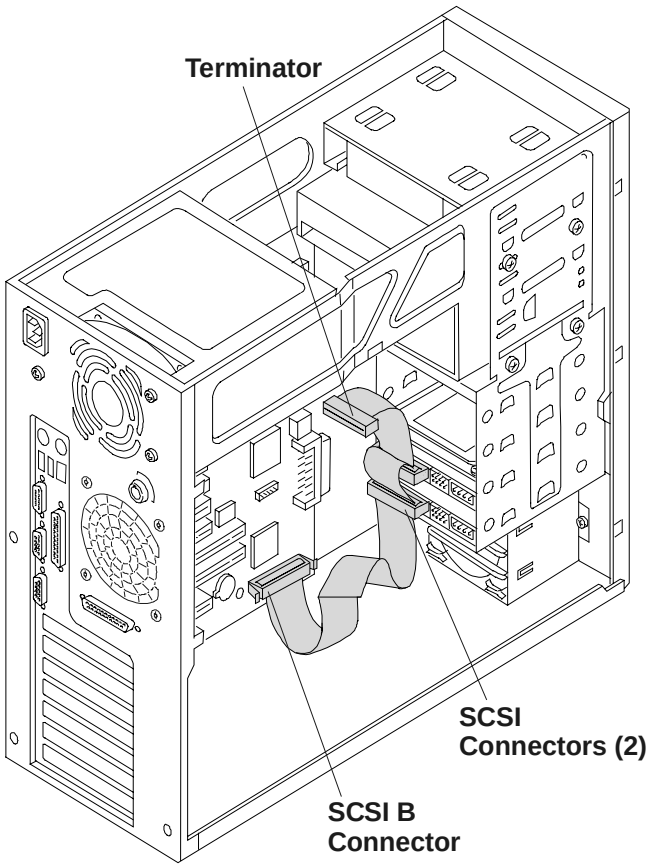
3. Connect the cables (data & power).
4. Replace the drive cage.



CAUTION	All mounting screws used to thread into the hard disk drive must be #6-32 and not exceed ¼-inch in length. Longer screws may cause internal damage to the mass storage device. Damage caused by incorrect mounting screws is not covered by the HP warranty.

5. If necessary, install the internal accessory SCSI cable into SCSI channel B and connect to the SCSI drives or optional backup tape drive.

   Use HP NetServer E 800 External/Internal SCSI Cable Kit, part number P1773A.

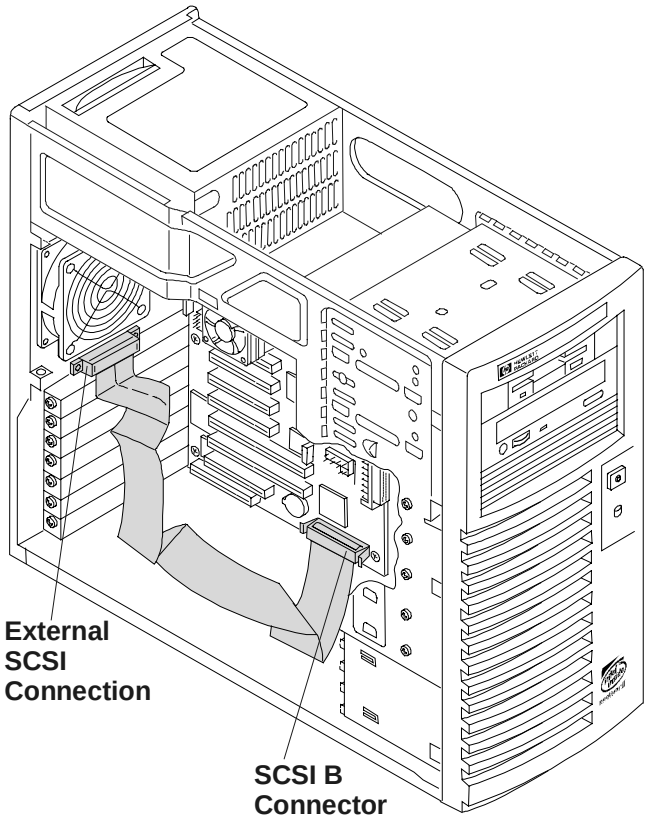


NOTE	The slower speed of the tape drive may slow disk access time for the Ultra-2 SCSI drives. You may connect the tape drive separately from the Ultra-2 SCSI drives using the optional internal accessory SCSI cable.

6. If necessary, install the external/internal SCSI cable into SCSI channel B and connect to the knock-out in the rear of the chassis.

   Use HP NetServer E 800 External/Internal SCSI Cable Kit, part number P1774A.

WARNING	Ensure you do not touch the sharp metal edges from the knock-out once you have removed it. The empty knock-out leaves sharp metal on the edges.

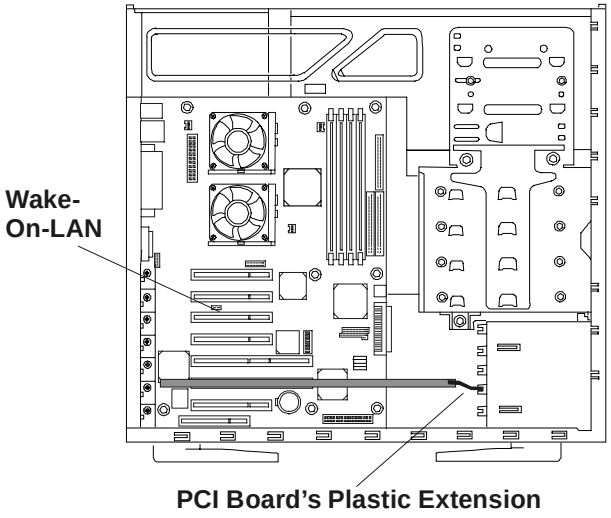


Step 5: Installing Adapter Boards

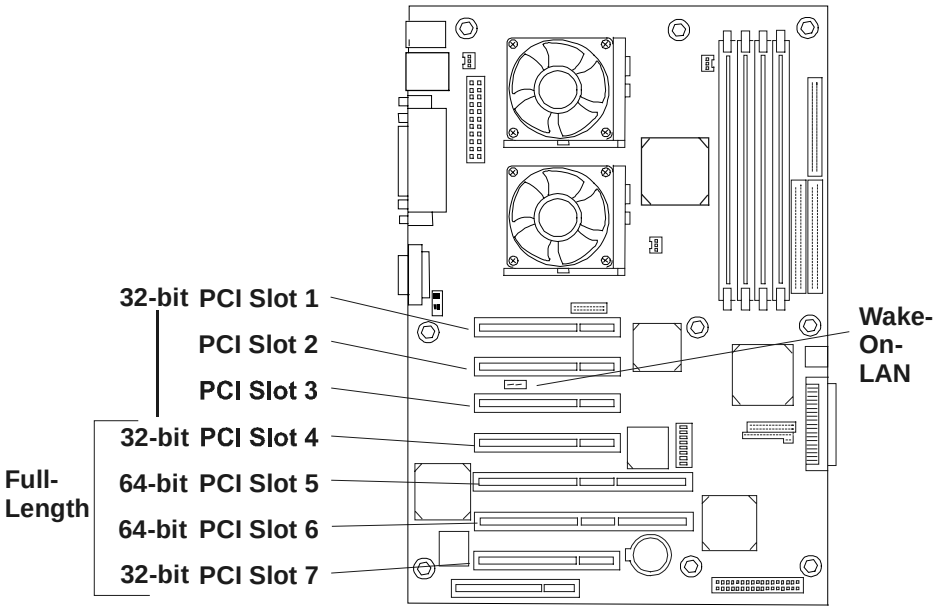
- The NetServer E 800 has two PCI (Primary and Secondary) busses and both are pear-to-pear, which provides approximately equal performance, except when using the two 64-bit slots versus the 32-bit slots.

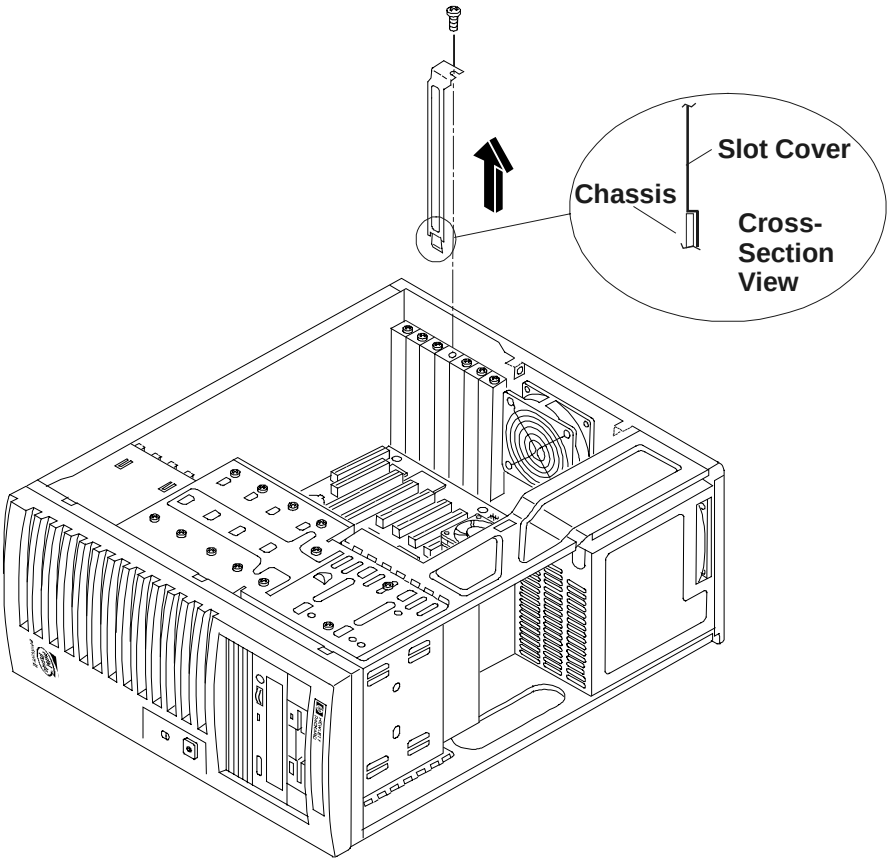
PCI Slots	PCI Bus
Slots 1 through 4	Primary PCI Bus
Slots 5 through 7	Secondary PCI Bus

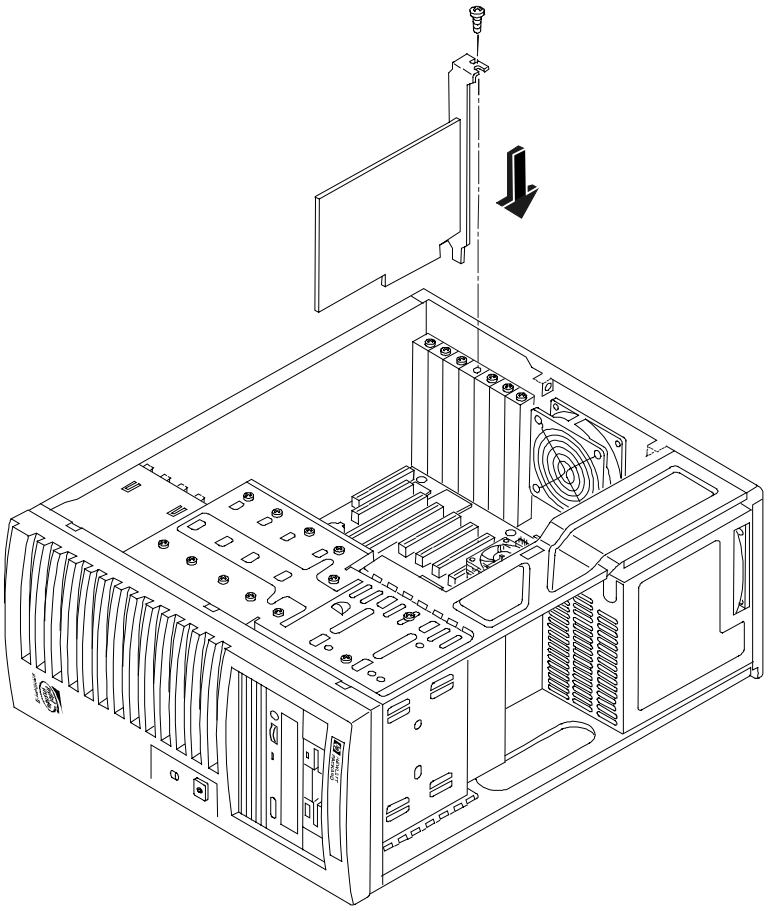
NOTE Some full-length PCI boards may need a plastic "handle" (board extension) on one end to stabilize the board in the NetServer. If the board requires one and it is not installed, you may need to install the handle on the board before installing it in the HP NetServer.



System Board (Top View)




Slot Cover
Chassis
Cross-
Section
View



Step 6: Installing a Second Processor

- Both processors must have the same clock speed and cache size.
- Use only processor upgrade kits with the same HP product number.

  This ensures the product numbers are compatible and the processor type, clock speed, and cache size are the same.

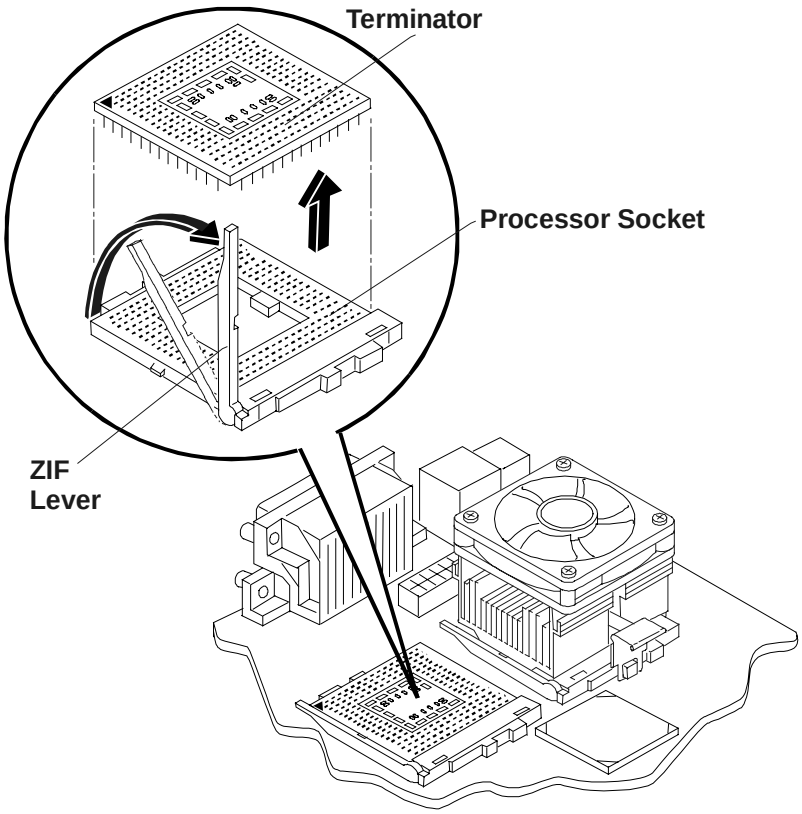
CAUTION	Do not open the new processor's protective bag or remove it from the bag until you are ready to install it. Always wear a wrist-strap and use a static-dissipating work surface connected to the chassis when handling components. Ensure the metal of the wrist strap contacts your skin. Before you remove a processor from the anti-static container, touch a grounded, unpainted metal surface on the HP NetServer to discharge static electricity.

NOTE	Some processor speeds listed for this HP NetServer may not be supported. For the latest support information, visit the HP web site: `http:/www.hp.com/go/netserver`

1. Open the ZIF (Zero Insertion Force) lever on the processor socket.

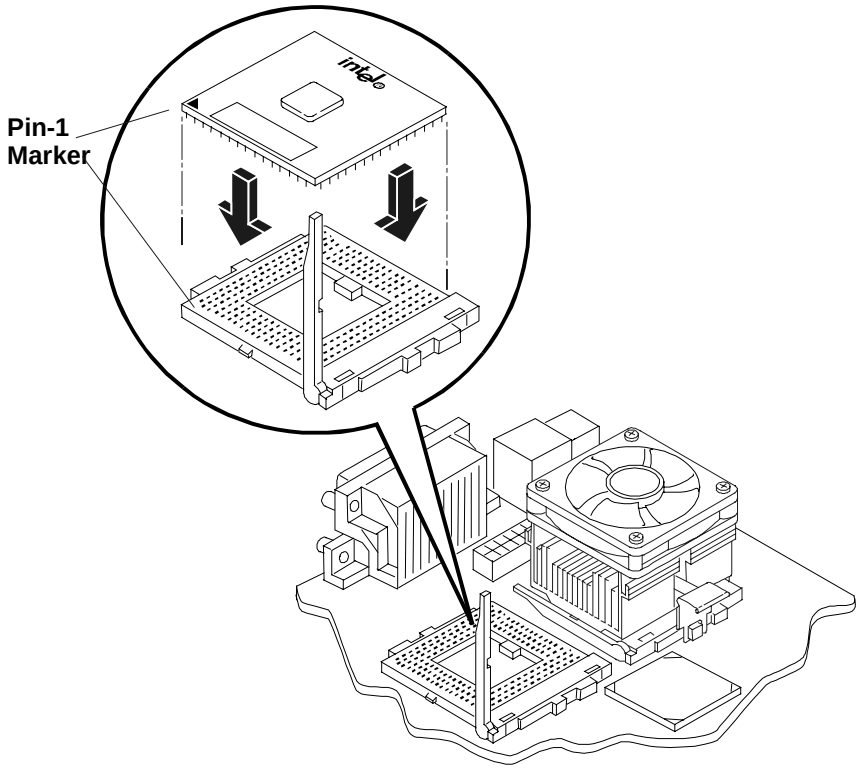
   The ZIF lever must open completely to a full 90° before removing the terminator from the socket.

2. Remove the terminator from the processor socket.



NOTE	Retain the terminator for future use. The NetServer will not operate properly if using only one processor with no terminator installed.

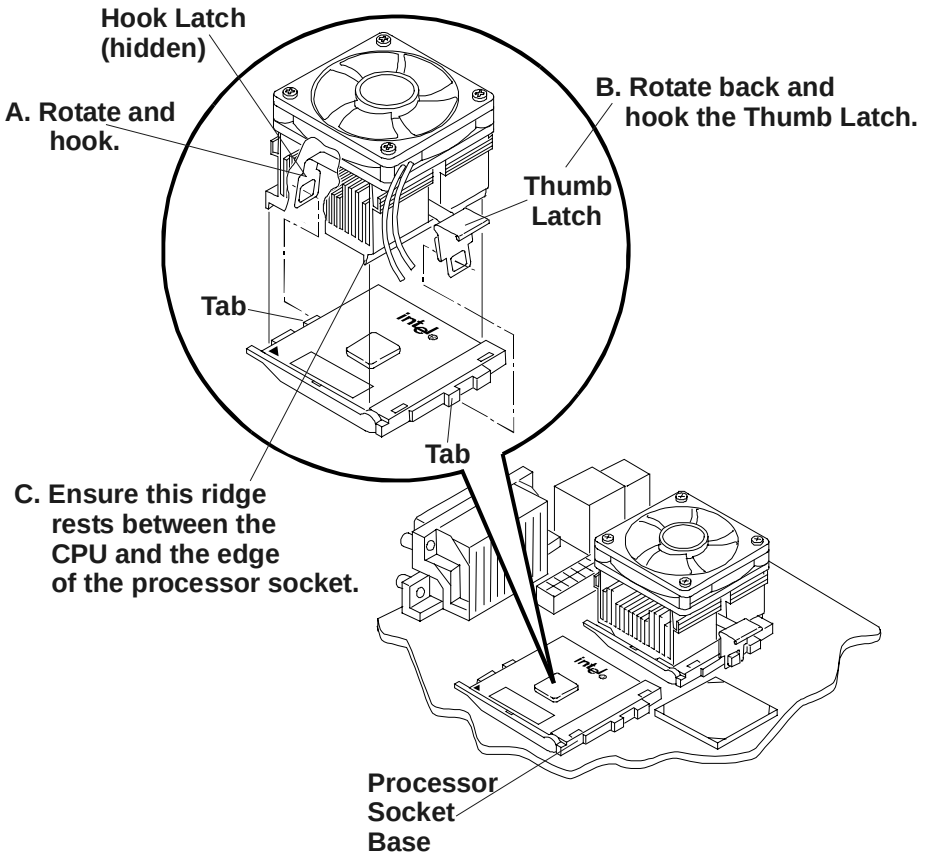
3. Insert the processor into socket, matching pin-1 to marker.



4. Close the ZIF lever with a click.

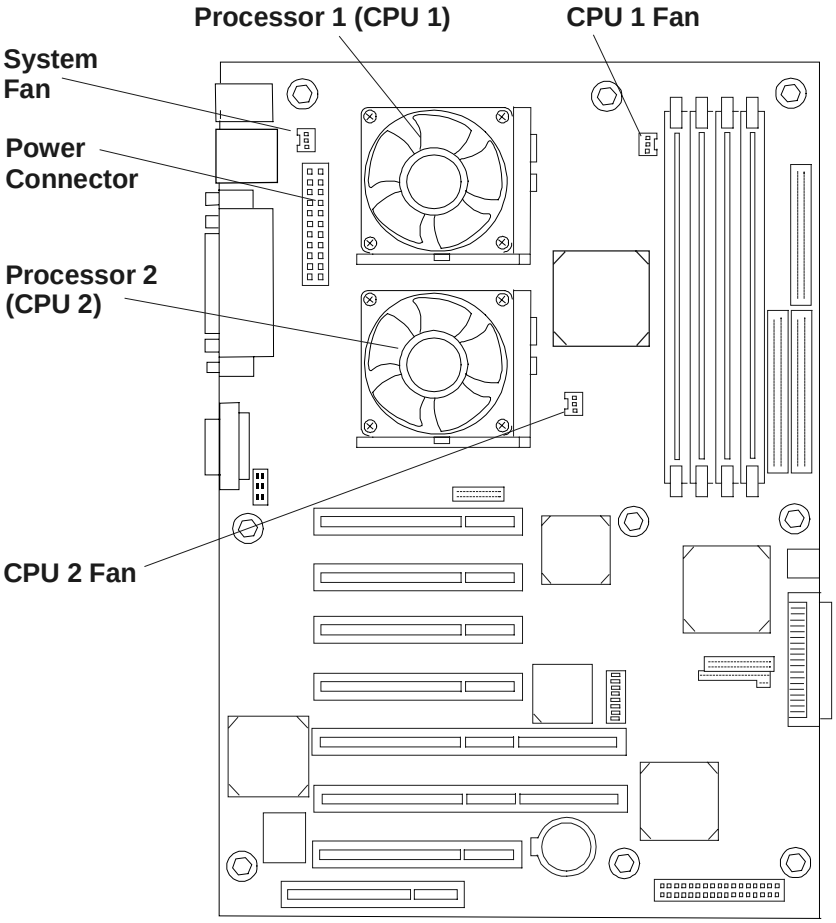
   The ZIF lever should click when closed.

5. Place the Heatsink-Fan on top of processor and follow the steps A-C in the figure below.



CAUTION	Failure to properly seat the heatsink-fan assembly on the processor will cause it to overheat and shutdown the NetServer within 20 seconds of powering on. It is possible there would be no messages displayed or the monitor may not have come on fully in time to see a message if it were displayed. The processor may be damaged if it is allowed to overheat.

6. Connect the fan connector to the respective connector on the system board.



CAUTION	Failure to connect the fan connector will cause the processor to overheat and the NetServer will shut down without any messages being displayed. If the processor is allowed to overheat, damage may occur.

Step 7: Configuring the HP NetServer

1. **Power on the HP NetServer and the monitor**:
   - ◊ Insert the *HP NetServer Navigator CD-ROM* in the CD-ROM drive.
   - ◊ The server should boot from the HP NetServer Navigator CD on its own, if not, turn the power off, wait 10 seconds and turn the power back on again.
   - ◊ If the system fails to boot, follow the instructions on the screen.
   - ◊ Press [**F2**] to enter Setup, or
   - ◊ Press [**F4**] to accept automatic configuration update
2. **Configure the NetServer and Install the Network Operating System (NOS):**
   - ◊ From the HP NetServer Navigator Main Menu, view the system **Readme** from the HP Navigator main menu for the most current installation information.
   - ◊ Use the HP NetServer Navigator to configure the server. Start with either the "Configuration/Installation Assistant" or "Configure the Server" option from the Main Menu (you will see one or the other depending upon your version of the CD). If you use Navigator's Express or Guided modes you will be prompted through the process.
   - ◊ During the configuration process you will be asked to select the NOS Installation Mode.

NOTE	If certain versions of the Novell NetWare or Microsoft Windows NT Server are used, a prompt will appear indicating selections of automated or manual NOS installation.

   - ◊ Choose the automated mode for first-time installation of Novell NetWare or Microsoft Windows 2000 (NT) Server on a factory-configured HP E-Series NetServer. You will be guided through the process by a series of HP display screens.
   - ◊ Perform a manual install if you are installing a NOS other than Novell NetWare or Microsoft Windows 2000 (NT) Server, you have replaced HP components (for example, replacing an HP Network Interface Card (NIC) with a NIC not on HP's Tested Products List (TPL) or adding a

SCSI controller board from a third-party).

You will need to use the NOS vendor's installation process. Be sure to first view and print the HP-customized NOS installation instructions and create the driver disk(s) for the NOS you are installing before leaving Navigator and installing your NOS.

3. **Install or Configure Tape Backup Software:**

   ◊ If your NetServer includes a preinstalled tape backup device, install and/or configure the tape backup software now.

   Refer to the Tape Backup Getting Started Guide for instructions on installing and configuring the tape backup software.

4. **Refer to the HP NetServer Online Documentation CD-ROM:**

   ◊ Use this CD-ROM for updated information about your HP NetServer and as reference for any additional information not provided in this Installation Guide.

NOTE	If you plan to use the Remote Console feature to run HP TopTools utilities remotely, the Utility Partition must be created using the HP NetServer Navigator. If you choose the Express or Guided mode of configuration, the partition will be created automatically. Otherwise, you will need to choose Install/Update Utility Partition during the custom configuration process.

5. **Run DiagTools: (Optional)**

   ◊ Create the HP DiagTools diskettes from the NetServer Utilities (or Diskette Library) on the *HP NetServer Navigator CD-ROM*.

   ◊ Run HP DiagTools and after completing all the configuration topics, save the support ticket to a diskette for future reference.